

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
06543/008002SERIAL NO.  
08/878,396INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT  
(Use several sheets if necessary)APPLICANT  
Andrew C. Payne et al.FILING DATE  
June 18, 1997GROUP *A.U.*  
~~244~~ *2766*

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>BEA</i>	AA 4 3 0 5 0 5 9	12/1981	Benton	<del>340</del>	<del>825.33</del>	
<i>BEA</i>	AB 4 5 7 8 5 3 0	03/1986	Zeidler	<del>170</del>	<del>22.09</del>	
<i>BEA</i>	AC 4 7 3 4 8 5 8	03/1988	Schlaflly	<del>364</del>	<del>408</del>	
<i>BEA</i>	AD 4 7 5 5 9 4 0	07/1988	Brachtl et al.	<del>364</del>	<del>408</del>	
<i>BEA</i>	AE 4 7 7 5 9 3 5	10/1988	Yourick	<del>364</del>	<del>401</del>	
<i>BEA</i>	AF 4 7 9 5 8 9 0	01/1989	Goldman	235	380	
<i>BEA</i>	AG 4 7 9 9 1 5 6	01/1989	Shavit et al.	<del>364</del>	<del>401</del>	
<i>BEA</i>	AH 4 8 1 2 6 2 8	03/1989	Boston et al.	235	380	
<i>BEA</i>	AI 4 8 2 7 5 0 8	05/1989	Shear	380	4	
<i>BEA</i>	AJ 4 9 2 2 5 2 1	05/1990	Krikke et al.	<del>370</del>	<del>95</del>	
<i>BEA</i>	AK 4 9 3 5 8 7 0	06/1990	Burk, Jr. et al.	<del>364</del>	<del>200</del>	
<i>BEA</i>	AL 4 9 4 7 0 2 8	08/1990	Gorog	<del>235</del>	<del>381</del>	
<i>BEA</i>	AM 4 9 7 7 5 9 5	12/1990	Ohta et al.	380	24	
<i>BEA</i>	AN 4 9 8 2 3 4 6	01/1991	Girouard et al.	<del>364</del>	<del>550</del>	
<i>BEA</i>	AO 4 9 9 2 9 4 0	02/1991	Dworkin	<del>364</del>	<del>401</del>	
<i>BEA</i>	AP 5 0 2 5 3 7 3	06/1991	Keyser, Jr. et al.	<del>364</del>	<del>408</del>	
<i>BEA</i>	AQ 5 0 6 0 1 5 3	10/1991	Nakagawa	<del>364</del>	<del>405</del>	
<i>BEA</i>	AR 5 0 7 7 6 0 7	12/1991	Johnson et al.	<del>358</del>	<del>86</del>	
<i>BEA</i>	AS 5 2 2 0 5 0 1	06/1993	Lawlor et al.	<del>364</del>	<del>408</del>	
<i>BEA</i>	AT 5 2 4 7 5 7 5	09/1993	Sprague et al.	380	9	
<i>BEA</i>	AU 5 3 0 5 1 9 5	04/1994	Murphy	<del>364</del>	<del>401</del>	03/1992
<i>BEA</i>	AV 5 3 1 1 5 9 4	05/1994	Penzias	380	24	03/26/1993
<i>BEA</i>	AW 5 3 2 1 7 5 1	06/1994	Ray et al.	380	24	02/18/1993
<i>BEA</i>	AX 5 3 3 6 8 7 0	08/1994	Hughes	235	379	05/1992
<i>BEA</i>	AY 5 3 4 1 4 2 9	08/1994	Stringer et al.	380	23	12/04/1992
<i>BEA</i>	AZ 5 3 4 7 6 3 2	09/1994	Filepp et al.	<del>395</del>	<del>200</del>	07/28/1989
<i>BEA</i>	AAA 5 3 5 1 1 8 6	09/1994	Bullock et al.	<del>364</del>	<del>401</del>	01/1991
<i>BEA</i>	AAB 5 3 5 1 2 9 3	09/1994	Michener et al.	380	21	02/1993
<i>BEA</i>	AAC 5 3 8 3 1 1 3	01/1995	Kight et al.	<del>364</del>	<del>401</del>	07/1991
<i>BEA</i>	AAD 5 4 1 4 8 3 3	05/1995	Hershey et al.	<del>395</del>	<del>575</del>	10/1993

EXAMINER

*GREGORY*

DATE CONSIDERED

*6/26/99*

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 06543/008002		SERIAL NO. 08/878,396							
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				APPLICANT Andrew C. Payne et al.									
				FILING DATE June 18, 1997		<del>GROUP 244</del> <i>AU, 2766</i>							
U.S. PATENT DOCUMENTS													
EXAMINER INITIAL		PATENT NUMBER		ISSUE DATE	PATENTEE	CLASS	SUBCLASS  FILING DATE IF APPROPRIATE						
<i>BEV</i>	BA	5	5	5	7	5	1	6	09/1996	Hogan	364	406	02/04/1994
<i>BEV</i>	BB	5	5	5	7	5	1	8	09/1996	Rosen	380	24	04/28/1994
<i>BEV</i>	BC	5	5	9	0	1	9	7	12/1996	Chen et al.	380	24	04/04/1995
<i>BEV</i>	BD	5	5	9	6	6	4	2	01/1997	Davis et al.	380	24	09/30/1994
<i>BEV</i>	BE	5	5	9	6	6	4	3	01/1997	Davis et al.	380	24	01/03/1994
<i>BEV</i>	BF	5	6	0	4	8	0	2	02/1997	Holloway	380	24	07/18/1994
<i>BEV</i>	BG	5	6	2	1	7	9	7	04/1997	Rosen	380	24	12/19/1995
<i>BEV</i>	BH	5	6	2	3	5	4	7	04/1997	Jones et al.	380	24	03/06/1995
<i>BEV</i>	BI	5	6	4	2	4	1	9	06/1997	Rosen	380	24	12/19/1995
<i>BEV</i>	BJ	5	7	1	5	3	1	4	02/1998	Payne et al.	380	24	10/24/1994
<i>BEV</i>	BK	5	7	2	4	4	2	4	03/1998	Gifford	380	24	12/16/1993
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION													
		DOCUMENT NUMBER		PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS  TRANSLATION YES NO						
<i>BEV</i>	BL	0-542-298-A2		05/1993	<del>Europe</del> <i>EPO</i>	<del>607F7</del>	<del>40</del> 98 AUG -3 AM 8:44 RECEIVED						
<i>BEV</i>	BM	2,102,606		02/1983	United Kingdom	<del>607F7</del>	<del>40</del> GROUP 2700						
<i>BEV</i>	BN	WO 91/16691		10/1991	W.I.P.O.	<del>607F7</del>	<del>40</del> GROUP 2700						
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)													
<i>BEV</i>	BO	Abadi, M. et al.; "Authentication and Delegation with Smart-Cards" Report 67; Systems Research Center;											
		Digital Equipment Corporation; Palo Alto, California; October 22, 1990, revised July 30, 1992											
<i>BEV</i>	BP	American National Standard; "Financial Institution Retail Message Authentication"; ANSI X9.19; 1986											
<i>BEV</i>	BQ	American National Standard; "Interchange Message Specification for Debit and Credit Card Message Exchange Among Financial Institutions"; ANSI X9.2; 1988											
<i>BEV</i>	BR	Anderson, Ross J.; "UEPS - A Second Generation Electronic Wallet"; Proc. of the Second European Symposium on Research in Computer Security (ESORICS); Toulouse, France; pp. 411-418; November, 1992											
EXAMINER <i>GREGORY</i>					DATE CONSIDERED <i>1/26/99</i>								
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.													

SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 06543/008002		SERIAL NO. 08/878,396	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				APPLICANT Andrew C. Payne et al.			
				FILING DATE June 18, 1997		GROUP <del>244</del> A, U. 2766	
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)							
BEA	CA	Anderson, Ross ; "Why Cryptosystems Fail"; Proc. 1st Conf. Computer and Comm. Security; pp. 215-227; November, 1993					
BEA	CB	Bank Administration Institute; <u>Payment Systems in Eleven Developed Countries</u> ; "United States"; pages 235-235; 1989					
BEA	CC	Batelaan; Butler; Chan; Chen; Evenchick; Hughes; Jen; Jeng; Millett; Riccio; Skoudis; Starace; Stoddard; "An Internet Billing Server Prototype Design"; Carnegie Mellon University; 1992					
BEA	CD	Batelaan; Butler; Chan; Chen; Evenchick; Hughes; Jen; Jeng; Millett; Riccio; Skoudis; Starace; Stoddard; "An Internet Billing Server: System Requirements"; Carnegie Mellon University; Master of Science thesis; 1992					
BEA	CE	Bellcore Internal E-Mail, November 24, 1993					
BEA	CF	Bender, M.; "EFTS: Electronic Funds Transfer Systems"; Kennikat Press; Port Washington, New York; pp. 43-46; 1975					
BEA	CG	Bodner; Carlos; Evans; Garcia; Ha; Harris; Reece; Russo; Sekino; Walker; "An Internet Billing Server: Analysis of Distributed Computing and Cross Platform Issues"; Carnegie Mellon University; thesis; 1993					
BEA	CH	Bodner; Carlos; Evans; Garcia; Ha; Harris; Reece; Russo; Sekino; Walker; "An Internet Billing Server: Availability, Reliability & Scalability Issues in the MS4 Billing Server Design & Prototype"; thesis; 1993					
BEA	CI	Bodner; Carlos; Evans; Garcia; Ha; Harris; Reece; Russo; Sekino; Walker; "The Internet Billing Server: Design Document"; Carnegie Mellon University Information Networking Institute; Master of Science thesis; 1993					
BEA	CJ	Bodner; Carlos; Evans; Garcia; Ha; Harris; Reece; Russo; Sekino; Walker; "The Internet Billing Server: Prototype Requirements"; Carnegie Mellon University Information Networking Institute; thesis; 1993					
BEA	CK	Bos et al.; "SmartCash: A Practical Electronic Payment System"; pp. 1-8; August, 1990					
BEA	CL	Bürk et al.; "Value Exchange Systems Enabling Security and Unobservability"; <u>Computers &amp; Security</u> , 9; pp. 715-721; 1990					
BEA	CM	Chaum et al.; "Achieving Electronic Privacy"; <u>Scientific American</u> ; pp. 319-327; 1988					
BEA	CN	Chaum, D.L. et al.; "Implementing Capability-Based Protection Using Encryption; Electronics Research Laboratory, College of Engineering, University of California, Berkeley, California; July 17, 1978					
EXAMINER		GREGORY		DATE CONSIDERED		1/26/99	
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Substitute Disclosure Form (PTO-1449)

SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 06543/008002		SERIAL NO. 08/878,396	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				APPLICANT Andrew C. Payne et al.			
				FILING DATE June 18, 1997		GROUP A, 4, 244 2766	
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)							
BE1	DA	Chaum et al.; "Untraceable Electronic Cash"; <u>Advances in Cryptology</u> ; pp. 319-327; 1988					
BE1	DB	Cohen, Danny; "Computerized Commerce"; ISI Reprint Series ISI/RS-89-243; October, 1989; Reprinted from Information Processing 89, Proceedings of the IFIP World Computer Congress, held August 28 - September 1 1989					
BE1	DC	Cohen, Danny; "Electronic Commerce"; University of Southern California, Information Sciences Institute, Research Report ISI/RR-89-244; October, 1989					
BE1	DD	Compuserve International; Compuserve Information Service Users Guide; pp. 109-114; 1986					
BE1	DE	X Computer Shopper; "Internet for Profit"; pages 180-182, 187, 190-192, 522-528, 532, 534; November, 1994					
BE1	DF	X Davies, D.W. and Price, W.L.; "Security for Computer Networks: An Introduction to Data Security in Teleprocessing and Electronic Funds Transfer"; John Wiley & Sons; December 5, 1985; pages 304-336					
BE1	DG	Dukach, Semyon; "SNPP: A Simple Network Payment Protocol"; MIT Laboratory for Computer Science; Cambridge, Massachusetts; 1993					
BE1	DH	Even et al.; "Electronic Wallet"; pp. 383-386; 1983					
BE1	DI	Gifford, David and Spector, Alfred; "Case Study: The CIRRUS Banking Network"; Comm. ACM 8, 28' pp. 797-8078; August, 1985					
BE1	DJ	Gifford, David K.; "Cryptographic Sealing for Information Secrecy and Authentication"; Stanford University and Xerox Palo Alto Research Center; Communications of the ACM; Vol. 25, No. 4; April, 1982					
BE1	DK	Gifford, David; "Notes on Community Information Systems" MIT LCS TM-419; December, 1989					
BE1	DL	Gligor, Virgil D. et al.; "Object Migration and Authentication"; IEEE Transactions on Software Engineering; Vol. SE-5, No. 6; November, 1979					
BE1	DM	Harty et al.; "Case Study: The VISA Transaction Processing System"; 1988					
BE1	DN	Information Network Institute, Carnegie Mellon University; Internet Billing Server; Prototype Scope Document; October 14, 1993					
EXAMINER		GREGORY		DATE CONSIDERED		1/26/99	
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

0022 2700  
98 AUG -3 AM 8:44

RECEIVED

Substitute Disclosure Form (PTO-1449)

RECEIVED  
JUN 30 PM 2:43  
GROUP 2700

SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 06543/008002		SERIAL NO. 08/878,396	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				APPLICANT Andrew C. Payne et al.			
				FILING DATE June 18, 1997		GROUP <del>2444</del> 4, U, 2766	
OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)							
BEA	EA	Intel Corporation; Power Technology; Marketing Brochure <i>NO DATE</i>					
BEA	EB	International Organization for Standardization; "International Standard: Bank Card Originated Messages - Interchange Message Specifications - Content for Financial Transactions"; ISO 8583; 1987					
BEA	EC	Intuit Corp Quicken User's Guide; "Paying Bills Electronically"; pp. 171-192; 1993					
BEA	ED	X Jansson, Lennart; "General Electronic Payment System"; 7th Proceedings of the International Conference on Computer Communication; Pages 832-837; 1985					
BEA	EE	Krajewski, M. et al.; "Applicability of Smart Cards to Network User Authentication"; <u>Computing Systems</u> ; Vol. 7, No. 1; 1994					
BEA	EF	Krajewski, M.; "Concept for a Smart Card Kerberos"; 15th National Computer Security Conference; October, 1992					
BEA	EG	Krajewski, M.; "Smart Card Augmentation of Kerberos"; Privacy and Security Research Group Workshop on Network and Distributed System Security; February, 1993					
BEA	EH	Lampson, Butler; Abadi, Martin; Burrows, Michael; and Wobber, Edward; "Authentication in Distributed Systems: Theory and Practice"; ACM Transactions on Computer Systems; Volume 10, Number 4; November, 1992; pp. 265-310					
BEA	EI	Mak, Stephen; "Network Based Billing Server"; Carnegie Mellon University Information Networking Institute; Masters of Science thesis; 1991					
BEA	EJ	Medvinsky et al.; "Electronic Currency for the Internet"; <u>Electronic Markets</u> ; pp. 30-31; September, 1993					
BEA	EK	Medvinsky et al.; "NetCash: A Design for Practical Electronic Currency on the Internet"; Proc. 1st ACM Conf. on Comp. and Comm. Security; November, 1993					
BEA	EL	Miller, S.P.; Neuman, B.C.; Schiller, J.I.; Saltzer, J.H.; "Kerberos Authentication and Authorization System"; Project Athena Technical Plan, Section E.2.1; Massachusetts Institute of Technology; October, 1988					
BEA	EM	Mosaic Communications Corp. press release; "Mosaic Communications Unveils Network Navigator and Server Software for the Internet"; September 12, 1994					
BEA	EN	Needham, Roger M. and Schroeder, Michael D.; "Using Encryption for Authentication in Large Networks of Computers"; Communications of the ACM; Volume 21, Number 12; December, 1978; Pages 993-999					
EXAMINER		GREGORY		DATE CONSIDERED		1/26/99	
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

RECEIVED  
 98 AUG -3 AM 8:44  
 0012 GROUP 2700  
 RECEIVED  
 98 JUL 30 PM 2:43  
 0012 GROUP 2700  
 RECEIVED  
 98 JUL 30 PM 2:43  
 0012 GROUP 2700

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
06543/008002SERIAL NO.  
08/878,396INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT  
(Use several sheets if necessary)APPLICANT  
Andrew C. Payne et al.FILING DATE  
June 18, 1997GROUP *A.U.*  
~~244~~ *2766*

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

<i>BEA</i>	FA	National Westminster Bank Group; "Clearing House Automated Payments System"; pp. 1-29, <i>NO DATE</i>
<i>BEA</i>	FB	Needham, Roger M.; "Adding Capability Access to Conventional File Servers"; Xerox Palo Alto Research Center; Palo Alto, California; <i>NO DATE</i>
<i>BEA</i>	FC	Neuman, B. Clifford; "Proxy-Based Authorization and Accounting for Distributed Systems"; Proceedings of the International Conference on Distributed Computing Systems; May 25-28, 1993; Conf. 13; IEEE pages 283-291
<i>BEA</i>	FD	Okamoto et al.; "Universal Electronic Cash"; pp. 324-337; 1991
<i>BEA</i>	FE	Pfitzmann et al.; "How to Break and Repair a 'Provably Secure' Untraceable Payment System"; pp. 338-350; 1991
<i>BEA</i>	FF	Rescorla, E. and Schiffman, A.; "The Secure HyperText Transfer Protocol"; Enterprise Integration Technologies; June, 1994
<i>BEA</i>	FG	Rivest, R.; "The MD5 Message-Digest Algorithm"; MIT Laboratory for Computer Science and RSA Data Security, Inc.; April, 1992
<i>BEA</i>	FH	Rivest, R.L. et al., "A Method for Obtaining Digital Signatures and Public-Key Cryptosystems," Laboratory for Computer Science, Massachusetts Institute of Technology, Cambridge, Massachusetts
<i>BEA</i>	FI	Schamüller-Bichl, I.; "IC-Cards in High-Security Applications"; Selected Papers from the Smart Card 2000 Conference; Springer Verlag; pp. 177-199; 1991
<i>BEA</i>	FJ	Sirbu, Marvin A.; "Internet Billing Service Design and Prototype Implementation"; <u>An Internet Billing Server</u> ; pp. 1-19; 1993
<i>BEA</i>	FK	Society for Worldwide Interbank Financial Telecommunications S.C.; "A S.W.I.F.T. Overview"
<i>BEA</i>	FL	Tenenbaum, Jay M. and Schiffman, Allan M.; "Development of Network Infrastructure and Services for Rapid Acquisition"; adapted from a white paper submitted to DARPA by MCC in collaboration with EIT and ISI
<i>BEA</i>	FM	Vittal, J. "Active Message Processing: Messages as Messengers"; pp. 175-195; 1981
<i>BEA</i>	FN	Voydock, Victor et al.; "Security Mechanisms in High-Level Network Protocols"; Computing Surveys; Vol. 15, No. 2; June, 1981

EXAMINER

*GREGORY*

DATE CONSIDERED

*1/26/99*

EXAMINER: Initial citation considered. Draw line through citation if not in compliance and not considered. Include copy of this form with next communication to applicant.

RECEIVED  
98 AUG -3 AM 8:44  
GROUP 2700

Substitute Disclosure Form (PTO-1449)

RECEIVED  
98 JUN 30 PM 2:44  
GROUP 2700